

Chase of the Smithsonian Institution for information concerning the location of the type of var. *glabratum*; to Professor M. L. Fernald of the Gray Herbarium for his kind loan of specimens; to Mr. F. W. Hunnewell of the New England Botanical Club for his loan of herbarium material; to Mr. Orr Goodson of the Field Museum for his kindness in loaning me herbarium material including the type of var. *glabratum*.

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THE IDENTITY OF ASTER SALSUGINOSUS
RICHARDSON

ARTHUR CRONQUIST

ON page 748, Appendix 7 (first edition), of Franklin's "Narrative of a Journey to the Shores of the Polar Sea", Richardson described *Aster salsuginosus* as follows:

323. *A. salsuginosus*: caule unifloro, foliis lineari-obovatis acutis sub-integerrimis venosis, calycibus laxe imbricatis linearibus acutis disco vix duplo radio plus triplo brevioribus. (W)¹

Herbaceus. *Caules* plures ex eadem radice, dodrantaes erecti aut ascendentes firmi simplices purpurei sed pilis brevissimis sub-incanis. *Folia* sessilia lineari-obovata lanceolatae plerumque acuta, integerrima vel ad apicem dentibus raris munita, venosa, utrinque concolora, supra glabra, subtus pilis brevibus patentissimis vestita. *Flos* magnus terminalis infra quem caulis paulo incrassatus est et villosus. *Calyx* laxiusculus pilis brevibus canis obtectus, laciniis linearibus acutis, marginibus purpurascens. *Flosculi disci* calyce fere duplo longiores: *radii* triginti sesqui-unguiculares disco duplo longiores, lineares sub-emarginati. *Germina* hirta pappo simplici dentato fuscuscente discum aequante coronata.

Hab. On the Salt Plains in the Athabasca.

A few years after Richardson's publication, Drummond returned from a trip to the Rocky Mountains, bringing specimens which Hooker identified as *A. salsuginosus*. Seeds which Drummond brought back were planted in gardens, and the garden plants were used for an excellent illustration in Curtis' Botanical Magazine (16: pl. 2942. 1829). Since that time, nearly all botanists, including Asa Gray as indicated by his treatments in

¹ As stated on page 730, W "denotes the wooded country from latitude 54 degrees to 64 degrees north."

the Synoptical Flora and elsewhere, seem to have accepted the Drummond specimens as typifying *Aster salsuginosus*.

In 1912 Dr. E. L. Greene² pointed out that *A. salsuginosus* Richardson (which by that time had been transferred to *Erigeron*) was not the same as the Rocky Mountain plant which commonly passed as *Erigeron salsuginosus* (Rich.) Gray. Without indicating the exact differences between it and *A. salsuginosus*, Greene proposed the name *E. callianthemus* for the Rocky Mountain plant. His proposal was not widely adopted.

In my work on the North American species of *Erigeron*, I was faced with the problem of the type of *A. salsuginosus*. It at once appeared that Richardson's description could not apply to the Rocky Mountain plant, which latter has distinctly glandular instead of white-hairy involucre, and has the leaves ordinarily essentially glabrous, certainly not "*supra glabra, subtus pilis brevibus patentissimis vestita.*"

A specimen of Richardson's original collection has been located at the Gray Herbarium, and through the kindness of Dr. M. L. Fernald has been made available to me for study. The label reads, in a bold hand which Dr. E. C. Abbe informs me is Richardson's, "323 *Aster salsuginosus*". Also on the label, in a hand which has not been identified, is the notation, "Richardson's Arctic Plants". The sheet bears two printed labels, which read, "Herb. John A. Lowell", and "Transferred from the Boston Society of Natural History to the Gray Herbarium of Harvard University, October 2, 1941". The number 323 on the label coincides with the number of the species in the first edition of Richardson's Appendix, and the plant matches the original description. There seems to be no room for doubt that it is one of the original Richardson specimens.

The plant is a form of the species which is now commonly called *A. Richardsonii* Spreng. It is larger than usual *A. Richardsonii*, approaching *A. Richardsonii* var. *meritus* (A. Nels.) Raup, but is clearly and unmistakably within the limits of variation of the species.

A. Richardsonii Spreng. was based on *A. montanus* Rich., which was the next species after *A. salsuginosus* in Richardson's appendix. (*A. montanus* Rich. was antedated by *A. montanus*

² E. L. Greene, *Some Erigeron Segregates*, Leaflet 2: 193-218 (1912).

Nutt., and thus untenable.) *A. salsuginosus* thus has obvious priority over *A. Richardsonii*.

I refrain from transferring *A. Richardsonii* var. *meritus* because I am not certain that *A. salsuginosus* is specifically distinct from *A. sibiricus* L. The two are evidently closely related, and an adequate decision can be reached only after study of a considerable series of specimens of each, in which I do not wish to involve myself at present.

The Rocky Mountain plant that has been confused with *A. salsuginosus* appears to be a subspecies of *Erigeron peregrinus* (Pursh) Greene. It may now be known as

E. PEREGRINUS (Pursh) Greene subsp. **callianthemus** (Greene), stat. nov. *E. callianthemus* Greene, Leaflet 2: 197, 1912.

This subspecies and its varieties will be more fully treated in my revision of the North American *Erigerons*.

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